This Page Is Inserted by IFW Operations and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

As rescanning documents will not correct images, please do not report the images to the Image Problem Mailbox.

COMBINED DECLARATION AND POWER OF ATTORNEY IN CONTINUATION-IN-PART PATENT APPLICATION

As below named inventor, I hereby declare that:

My residence, post office address citizenship are stated below next to my name;

That I verily believe that I am an original and joint first inventor of the subject matter which is claimed and for which a patent is sought on the invention entitled

MULTI-LEVEL, HIERARCHICAL RADIO-FREQUENCY COMMUNICATION SYSTEM

described and claimed in the specification attached herewith, or as filed on April 28, 1992 as U.S. Serial No. 07/876,776.

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims.

I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, Section 1.56(a).

CLAIM FOR BENEFIT OF EARLIER U.S. APPLICATIONS UNDER 35 U.S.C. 120

I hereby claim benefit under Title 35, United States Code, Section 120 of any United States applications that are listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in those prior applications in the manner provided by the first paragraph of Title 35, United States Code, Section 112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, Section 1.56(a), which occurred between the filing date of the prior applications and the filing date of this application:

Listing of Earlier U.S. Application for Which Benefit is Claimed Under 35 U.S.C. 120

U.S. Serial No.	U.S. Filing Date	Named Inventors
(1) 07/305,302 (Attorney Docket No.	January 31, 1989 6649)	Phillip Miller Steven E. Koenck Joseph J. Kubler Keith K. Cargin, Jr. George E. Hanson Patrick H. Davis

(2) 07/345,200 April 28, 1989 (Attorney Docket No. 6649-X)

George E. Hanson

(3) 07/346,771 May 2, 1989 (Attorney Docket No. 6649-Y)

Phillip Miller
Steven E. Koenck
Jerry L. Walter
Joseph J. Kubler
Keith K. Cargin, Jr.
George E. Hanson
Patrick H. Davis
Steven R. Kunert
Darald R. Schultz

(4) 07/347,602 May 3, 1989 (Attorney Docket No. 6649XX) Phillip Miller
Steven E. Koenck
Jerry L. Walter
Joseph J. Kubler
Keith K. Cargin, Jr.
George E. Hanson
Patrick H. Davis
Steven R. Kunert
Darald R. Schultz

(5) 07/529,353 May 25, 1990 (Attorney Docket No. 6649XY)

Phillip Miller
Steven E. Koenck
Ronald L. Mahany
Alan G. Bunte
Keith K. Cargin, Jr.
George E. Hanson
Steven H. Salvay

(6) 07/558,895 July 25, 1990 (Attorney Docket No. 6649XZ)

Steven E. Koenck
Alan G. Bunte
Keith K. Cargin, Jr.
George E. Hanson
Ronald L. Mahany
Phillip Miller
Steven H. Salvay

(7) 07/854,115 March 18, 1992 (Attorney Docket No. 6649XZA)

Steven E. Koenck
Alan G. Bunte
Keith K. Cargin, Jr.
George E. Hanson
Ronald L. Mahany
Phillip Miller
Arvin D. Danielson
Guy J. West
Steven H. Salvay

I hereby appoint as my attorneys, with full powers of substitution and revocation, to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith:

George P. McAndrews	Reg.	No.	22760
John J. Held, Jr.	Reg.	No.	21061
Timothy J. Malloy	Reg.		25600
William M. Wesley	Reg.		26521
L. Michael Jarvis	Reg.		27341
Robert C. Ryan	Reg.	No.	29343
Gregory J. Vogler	Reg.		31313
Donald J. Pochopien	Reg.		32167
Jean Dudek Kuelper	Reg.	No.	30171
Herbert D. Hart III	Reg.	No.	30063
Robert W. Fieseler	Reg.	No.	31826
Donald P. Reynolds	Reg.	No.	26220
Steven J. Hampton	Reg.	No.	33707
Alejandro Menchaca	Reg.	No.	34389
Priscilla F. Gallagher	Reg.		32223
George F. Wheeler	Reg.	No.	28766
Robert Polit	Reg.		33993

the address and telephone number of each of whom is McAndrews, Held & Malloy, Ltd. Northwestern Atrium Center, 500 West Madison Street, 34th Floor, Chicago, Illinois 606661, 312-707-8889, and

John H. Sherman Rec

Reg. No. 16909

of Cedar Rapids, Iowa.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of first joint inventor <u>Steven E. Koenck</u> Inventor's signature <u>Steven E. Koenck</u> Date <u>Steven E. Koenck</u> D
Inventor's signature the town Date Sine 4, 1992
Resident Address 964-44th Street SE
Cedar Rapids, Iowa 52403
Citizenship United States of America
Post Office Address Same

Full name of second joint inventor Alan G. Bur	ice
Inventor's signature Man & Bush	
Resident Address	
Cedar Rapids, Iowa 52402	
Citizenship United States of America	
Post Office AddressSame	
TODE OTTION INCIDENCE TO THE TOTAL T	
Full name of third joint inventor <u>Keith K. Car</u>	gin, Jr.
Inventor's signature	Date
Resident Address 3219 Blue Ridge Drive NE	
Cedar Rapids, Iowa 52402	
Citizenship <u>United States of America</u>	
Post Office Address <u>Same</u>	
Full name of fourth joint inventor <u>George E. F</u>	lanson
Inventor's signature	Date
Resident Address 1139 "O" Avenue NW	
Cedar Rapids, Iowa 52405	
Citizenship <u>United States of America</u>	•
Post Office Address <u>Same</u>	
Full name of fifth joint inventor Ronald L. Ma	hany
Inventor's signature	Date 7/21/92
Resident Address 1330 Sierra Drive NE	
Cedar Rapids, Iowa 52402	
Citizenship <u>United States of America</u>	
Post Office Address Same	

.

Full name of sixth joint inventor Phillip Miller
Inventor's signature Philly Mills Date 9/5/92
Resident Address 4114 Sunshine Street SW
Cedar Rapids, Iowa 52404
Citizenship United States of America
Post Office Address Same
Full name of seventh joint inventorSteven H. Salvay
Inventor's signature Date
Resident Address <u>c/o Norand Corporation</u>
550 Second Street SE
Cedar Rapids, Iowa 52401
Citizenship United States of America
Post Office Address Same
Full name of eighth joint inventor <u>Arvin D. Danielson</u> Inventor's signature Date <u>COCSIST</u> Resident Address <u>R.R. #2, Box 229A6</u> Solon, Iowa 52333
CitizenshipUnited States of America
Post Office Address Same
Full name of ninth joint inventor Guy J. West Inventor's signature Luft West Date Z6-Jun-92
Resident Address 1829 Grande Avenue SE
Cedar Rapids, Iowa 52403
Citizenship United States of America
Post Office Address Same

Patrick H. Davis

COMBINED DECLARATION AND POWER OF ATTORNEY IN CONTINUATION-IN-PART PATENT APPLICATION

As below named inventor, I hereby declare that:

My residence, post office address citizenship are stated below next to my name;

That I verily believe that I am an original and joint first inventor of the subject matter which is claimed and for which a patent is sought on the invention entitled

MULTI-LEVEL, HIERARCHICAL RADIO-FREQUENCY COMMUNICATION SYSTEM

described and claimed in the specification attached herewith, or as filed on April 28, 1992 as U.S. Serial No. 07/876,776.

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims.

I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, Section 1.56(a).

CLAIM FOR BENEFIT OF EARLIER U.S. APPLICATIONS UNDER 35 U.S.C. 120

I hereby claim benefit under Title 35, United States Code, Section 120 of any United States applications that are listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in those prior applications in the manner provided by the first paragraph of Title 35, United States Code, Section 112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, Section 1.56(a), which occurred between the filing date of the prior applications and the filing date of this application:

Listing of Earlier U.S. Application for Which Benefit is Claimed Under 35 U.S.C. 120

U.S. Serial No.	U.S. Filing Date	Named Inventors
(1) 07/305,302 (Attorney Docket No.	January 31, 1989 6649)	Phillip Miller Steven E. Koenck Joseph J. Kubler Keith K. Cargin, Jr George E. Hanson

(2) 07/345,200 April 28, 1989 (Attorney Docket No. 6649-X)

George E. Hanson

(3) 07/346,771 May 2, 1989 (Attorney Docket No. 6649-Y)

Phillip Miller
Steven E. Koenck
Jerry L. Walter
Joseph J. Kubler
Keith K. Cargin, Jr.
George E. Hanson
Patrick H. Davis
Steven R. Kunert
Darald R. Schultz

(4) 07/347,602 May 3, 1989 (Attorney Docket No. 6649XX) Phillip Miller
Steven E. Koenck
Jerry L. Walter
Joseph J. Kubler
Keith K. Cargin, Jr.
George E. Hanson
Patrick H. Davis
Steven R. Kunert
Darald R. Schultz

(5) 07/529,353 May 25, 1990 (Attorney Docket No. 6649XY)

Phillip Miller
Steven E. Koenck
Ronald L. Mahany
Alan G. Bunte
Keith K. Cargin, Jr.
George E. Hanson
Steven H. Salvay

(6) 07/558,895 July 25, 1990 (Attorney Docket No. 6649XZ)

Steven E. Koenck Alan G. Bunte Keith K. Cargin, Jr. George E. Hanson Ronald L. Mahany Phillip Miller Steven H. Salvay

(7) 07/854,115 March 18, 1992 (Attorney Docket No. 6649XZA)

Steven E. Koenck
Alan G. Bunte
Keith K. Cargin, Jr.
George E. Hanson
Ronald L. Mahany
Phillip Miller
Arvin D. Danielson
Guy J. West
Steven H. Salvay

I hereby appoint as my attorneys, with full powers of substitution and revocation, to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith:

George P. McAndrews	Reg.	No.	22760
John J. Held, Jr.	Reg.		21061
Timothy J. Malloy	Reg.	No.	25600
William M. Wesley	_	No.	26521
L. Michael Jarvis	Reg.	No.	27341
Robert C. Ryan	Reg.		29343
Gregory J. Vogler	Reg.		31313
Donald J. Pochopien	Reg.		32167
Jean Dudek Kuelper	_	No.	30171
Herbert D. Hart III	_	No.	30063
Robert W. Fieseler	Req.	No.	31826
Donald P. Reynolds	Req.	No.	26220
Steven J. Hampton	Reg.	No.	33707
Alejandro Menchaca	Reg.	No.	34389
Priscilla F. Gallagher	Reg.	No.	32223
George F. Wheeler	Reg.	No.	28766
Robert Polit	Reg.	No.	33993

the address and telephone number of each of whom is McAndrews, Held & Malloy, Ltd. Northwestern Atrium Center, 500 West Madison Street, 34th Floor, Chicago, Illinois 606661, 312-707-8889, and

John H. Sherman Reg. No. 16909

of Cedar Rapids, Iowa.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of first joint inventorSteven E.]	Koenck
Inventor's signature	
Resident Address 964-44th Street SE	
Cedar Rapids, Iowa 52403	
Citizenship United States of America	
Post Office Address Same	

Full name of second joint inventor	Alan G. Bunte
Inventor's signature	Date
Resident Address <u>5510 Hickorywood</u>	
Cedar Rapids, Iov	
Citizenship <u>United States of Am</u>	
Post Office AddressSame	
Full name of third joint inventor	Keith K. Cargin. Jr.
Resident Address 3219 Blue Ridge D	
Cedar Rapids, Iow	
Citizenship <u>United States of Am</u>	erica
Post Office AddressSame	
Full name of fourth joint inventor _	George E. Hanson
Inventor's signature	Date
Resident Address 1139 "O" Avenue N	W
Cedar Rapids, Iow	
Citizenship <u>United States of Am</u>	
Post Office Address <u>Same</u>	
Full name of fifth joint inventor	Ronald L. Mahany
Inventor's signature	Date
Resident Address <u>1330 Sierra Drive</u>	NE
Cedar Rapids, Iow	
Citizenship <u>United States of Am</u> e	erica
Post Office Address Same	

* 1

Full name of sixth joint inventor Phillip Mi	ller
Inventor's signature	Date
Resident Address 4114 Sunshine Street SW	
Cedar Rapids, Iowa 52404	
Citizenship United States of America	
Post Office Address <u>Same</u>	
Full name of seventh joint inventorSteven H.	Salvay
Inventor's signature	Date
Resident Address <u>c/o Norand Corporation</u>	
550 Second Street SE	
Cedar Rapids, Iowa 52401	
Citizenship <u>United States of America</u>	
Post Office Address	
Full name of eighth joint inventor <u>Arvin D. D</u>	anielson
Inventor's signature	Date
Resident Address R.R. #2, Box 229A6	
Solon, Iowa 52333	```
Citizenship <u>United States of America</u>	<u></u>
Post Office Address <u>Same</u>	
Full name of ninth joint inventor <u>Guy J. West</u>	
Inventor's signature	Date
Resident Address <u>1829 Grande Avenue SE</u>	
Cedar Rapids, Iowa 52403	
Citizenship <u>United States of America</u>	
Post Office Address Same	

COMBINED DECLARATION AND POWER OF ATTORNEY IN CONTINUATION-IN-PART PATENT APPLICATION

As below named inventor, I hereby declare that:

My residence, post office address citizenship are stated below next to my name;

That I verily believe that I am an original and joint first inventor of the subject matter which is claimed and for which a patent is sought on the invention entitled

MULTI-LEVEL, HIERARCHICAL RADIO-FREQUENCY COMMUNICATION SYSTEM

described and claimed in the specification attached herewith, or as filed on April 28, 1992 as U.S. Serial No. 07/876,776.

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims.

I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, Section 1.56(a).

CLAIM FOR BENEFIT OF EARLIER U.S. APPLICATIONS UNDER 35 U.S.C. 120

I hereby claim benefit under Title 35, United States Code, Section 120 of any United States applications that are listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in those prior applications in the manner provided by the first paragraph of Title 35, United States Code, Section 112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, Section 1.56(a), which occurred between the filing date of the prior applications and the filing date of this application:

Listing of Earlier U.S. Application for Which Benefit is Claimed Under 35 U.S.C. 120

U.S. Serial No.	U.S. Filing Date	Named Inventors
(1) 07/305,302 (Attorney Docket No.	January 31, 1989 6649)	Phillip Miller Steven E. Koenck Joseph J. Kubler Keith K. Cargin, Jr. George E. Hanson Patrick H. Davis

(2) 07/345,200 April 28, 1989 (Attorney Docket No. 6649-X)

(3) 07/346,771 May 2, 1989 (Attorney Docket No. 6649-Y)

(4) 07/347,602 May 3, 1989 (Attorney Docket No. 6649XX)

(5) 07/529,353 May 25, 1990 (Attorney Docket No. 6649XY)

(6) 07/558,895 July 25, 1990 (Attorney Docket No. 6649XZ)

(7) 07/854,115 March 18, 1992 (Attorney Docket No. 6649XZA)

George E. Hanson

Phillip Miller
Steven E. Koenck
Jerry L. Walter
Joseph J. Kubler
Keith K. Cargin, Jr.
George E. Hanson
Patrick H. Davis
Steven R. Kunert
Darald R. Schultz

Phillip Miller
Steven E. Koenck
Jerry L. Walter
Joseph J. Kubler
Keith K. Cargin, Jr.
George E. Hanson
Patrick H. Davis
Steven R. Kunert
Darald R. Schultz

Phillip Miller
Steven E. Koenck
Ronald L. Mahany
Alan G. Bunte
Keith K. Cargin, Jr.
George E. Hanson
Steven H. Salvay

Steven E. Koenck Alan G. Bunte Keith K. Cargin, Jr. George E. Hanson Ronald L. Mahany Phillip Miller Steven H. Salvay

Steven E. Koenck
Alan G. Bunte
Keith K. Cargin, Jr.
George E. Hanson
Ronald L. Mahany
Phillip Miller
Arvin D. Danielson
Guy J. West
Steven H. Salvay

I hereby appoint as my attorneys, with full powers of substitution and revocation, to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith:

George P. McAndrews John J. Held, Jr. Timothy J. Malloy William M. Wesley L. Michael Jarvis Robert C. Ryan Gregory J. Vogler Donald J. Pochopien Jean Dudek Kuelper Herbert D. Hart III Robert W. Fieseler Donald P. Reynolds Steven J. Hampton Alejandro Menchaca Priscilla F. Gallagher George F. Wheeler	Reg.	No.	22760 21061 25600 26521 27341 29343 31313 32167 30171 30063 31826 26220 33707 34389 32223 28766
George F. Wheeler Robert Polit	Reg. Reg.	NO.	33993

the address and telephone number of each of whom is McAndrews, Held & Malloy, Ltd. Northwestern Atrium Center, 500 West Madison Street, 34th Floor, Chicago, Illinois 606661, 312-707-8889, and

John H. Sherman

Reg. No. 16909

of Cedar Rapids, Iowa.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of first joint inventor <u>Steven E. Koenck</u>
Inventor's signature Date
Resident Address 964-44th Street SE
Cedar Rapids, Iowa 52403
CitizenshipUnited States of America
Post Office Address Same

Full name of second joint inventor Alan G. Bunte
Inventor's signature Date
Resident Address
Cedar Rapids, Iowa 52402
Citizenship United States of America
Post Office Address
Full name of third joint inventor <u>Keith K. Cargin. Jr.</u>
Inventor's signature Date
Resident Address 3219 Blue Ridge Drive NE
Cedar Rapids, Iowa 52402
Citizenship <u>United States of America</u>
Post Office Address Same
Full name of fourth joint inventor <u>George E. Hanson</u>
Inventor's signature June 1/29/92 Date 6/29/92
Resident Address 1139 "O" Avenue NW
Cedar Rapids, Iowa 52405
CitizenshipUnited States of America
Post Office Address <u>Same</u>
Full name of fifth joint inventor Ronald L. Mahany
Inventor's signature Date
Resident Address 1330 Sierra Drive NE
Cedar Rapids, Iowa 52402
CitizenshipUnited States of America
Post Office Address Same

Full name of sixth joint inventorPhillip M	iller
Inventor's signature	_ Date
Resident Address 4114 Sunshine Street SW	
Cedar Rapids, Iowa 52404	
Citizenship <u>United States of America</u>	
Post Office Address <u>Same</u>	· .
Full name of seventh joint inventorSteven H	Calvav
Inventor's signature	
Resident Address <u>c/o Norand Corporation</u>	
550 Second Street SE	
Cedar Rapids, Iowa 52401	
Citizenship <u>United States of America</u>	
Post Office Address <u>Same</u>	
Tall mine of sighth doint inventor. Arvin D	Danielson
Full name of eighth joint inventor <u>Arvin D.</u>	
Inventor's signature	
Resident Address R.R. #2, Box 229A6	
Solon, Iowa 52333	```
Citizenship <u>United States of America</u>	
Post Office AddressSame	
Full name of minth joint inventor Guy J. Wes	
Inventor's signature	
Resident Address 1829 Grande Avenue SE	
Cedar Rapids, Iowa 52403	
Citizenship <u>United States of America</u>	

Variation of the state of the s

r. i

T. 8

.

.

:

COMBINED DECLARATION AND POWER OF ATTORNEY IN CONTINUATION-IN-PART PATENT APPLICATION

As below named inventor, I hereby declare that:

My residence, post office address citizenship are stated below next to my name;

That I verily believe that I am an original and joint first inventor of the subject matter which is claimed and for which a patent is sought on the invention entitled

MULTI-LEVEL, HIERARCHICAL RADIO-FREQUENCY COMMUNICATION SYSTEM

described and claimed in the specification attached herewith, or as filed on April 28, 1992 as U.S. Serial No. 07/876,776.

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims.

I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, Section 1.56(a).

CLAIN FOR BENEFIT OF EARLIER U.S. APPLICATIONS UNDER 35 U.S.C. 120

I hereby claim benefit under Title 35, United States Code, Section 120 of any United States applications that are listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in those prior applications in the manner provided by the first paragraph of Title 35, United States Code, Section 112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, Section 1.56(a), which occurred between the filing date of the prior applications and the filing date of this application:

Listing of Earlier U.S. Application for Which Benefit is Claimed Under 35 U.S.C. 120

U.S. Serial No.	U.S. Filing Date	Named Inventors
(1) 07/305,302 (Attorney Docket No.	January 31, 1989 6649)	Phillip Miller Steven E. Koenck Joseph J. Kubler Keith K. Cargin, Jr. George E. Hanson Patrick H. Davis

(2) 07/345,200 April 28, 1989 (Attorney Docket No. 6649-X)

George E. Hanson

(3) 07/346,771 May 2, 1989 (Attorney Docket No. 6649-Y)

Phillip Miller
Steven E. Koenck
Jerry L. Walter
Joseph J. Kubler
Keith K. Cargin, Jr.
George E. Hanson
Patrick H. Davis
Steven R. Kunert
Darald R. Schultz

(4) 07/347,602 May 3, 1989 (Attorney Docket No. 6649XX) Phillip Miller
Steven E. Koenck
Jerry L. Walter
Joseph J. Kubler
Keith K. Cargin, Jr.
George E. Hanson
Patrick H. Davis
Steven R. Kunert
Darald R. Schultz

(5) 07/529,353 May 25, 1990 (Attorney Docket No. 6649XY)

Phillip Miller Steven E. Koenck Ronald L. Mahany Alan G. Bunte Keith K. Cargin, Jr. George E. Hanson Steven H. Salvay

(6) 07/558,895 July 25, 1990 (Attorney Docket No. 6649XZ)

Steven E. Koenck Alan G. Bunte Keith K. Cargin, Jr. George E. Hanson Ronald L. Mahany Phillip Miller Steven H. Salvay

(7) 07/854,115 March 18, 1992 (Attorney Docket No. 6649XZA)

Steven E. Koenck
Alan G. Bunte
Keith K. Cargin, Jr.
George E. Hanson
Ronald L. Mahany
Phillip Miller
Arvin D. Danielson
Guy J. West
Steven H. Salvay

I hereby appoint as my attorneys, with full powers of substitution and revocation, to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith:

George P. McAndrews	Reg.	No.	22760
John J. Held, Jr.	Reg.	No.	21061
Timothy J. Malloy	Reg.	No.	25600
William M. Wesley	Reg.	No.	26521
L. Michael Jarvis	Reg.		27341
Robert C. Ryan	Reg.		29343
Gregory J. Vogler	Reg.		31313
Donald J. Pochopien	Reg.		32167
Jean Dudek Kuelper	Reg.		30171
Herbert D. Hart III	Reg.		30063
Robert W. Fieseler	Reg.		31826
Donald P. Reynolds	Reg.	No.	26220
Steven J. Hampton	Reg.	No.	33707
Alejandro Menchaca	Reg.	No.	34389
Priscilla F. Gallagher	Reg.	No.	32223
George F. Wheeler	Reg.	No.	28766
Robert Polit	Reg.	No.	33993

the address and telephone number of each of whom is McAndrews, Held & Malloy, Ltd. Northwestern Atrium Center, 500 West Madison Street, 34th Floor, Chicago, Illinois 606661, 312-707-8889, and

John H. Sherman Reg. No. 16909

of Cedar Rapids, Iowa.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of first joint inventorSteven E.	Koenck
Inventor's signature	Date
<u> </u>	
Resident Address 964-44th Street SE	
Cedar Rapids, Iowa 52403	
Citizenship United States of America	
<u> </u>	
Post Office Address Same	

Full name of second joint inventor Alan G. Bunte
Inventor's signature Date
Resident Address <u>5510 Hickorywood Court</u>
Cedar Rapids, Iowa 52402
Citizenship United States of America
Post Office Address Same
Full name of third joint inventor <u>Keith K. Cargin, Jr.</u>
Inventor's signature Date
Resident Address 3219 Blue Ridge Drive NE
Cedar Rapids, Iowa 52402
Citizenship <u>United States of America</u>
Post Office Address Same
Full name of fourth joint inventor <u>George E. Hanson</u>
Inventor's signature Date
Resident Address 1139 "O" Avenue NW
Cedar Rapids, Iowa 52405
Citizenship United States of America
Post Office Address <u>Same</u>
Full name of fifth joint inventor <u>Ronald L. Mahany</u>
Inventor's signature Date
Resident Address 1330 Sierra Drive NE
Cedar Rapids, Iowa 52402
Citizenship United States of America
Post Office Address Same

:

Full name of sixth joint inventor Phillip Miller
Inventor's signature Date
Resident Address 4114 Sunshine Street SW
Cedar Rapids, Iowa 52404
CitizenshipUnited States of America
Post Office Address Same
Full name of seventh joint inventor <u>Steven H. Salvay</u>
Inventor's signature Atway Date 6-7-92
Resident Address <u>c/o Norand Corporation</u>
550 Second Street SE
Cedar Rapids, Iowa 52401
Citizenship United States of America
Post Office Address
Full name of eighth joint inventor <u>Arvin D. Danielson</u>
Inventor's signature Date
Resident Address R.R. #2, Box 229A6
Solon, Iowa 52333
Citizenship <u>United States of America</u>
Post Office Address <u>Same</u>
Full name of ninth joint inventor Guy J. West
Inventor's signature Date
Resident Address 1829 Grande Avenue SE
Cedar Rapids, Iowa 52403
Citizenship <u>United States of America</u>
Post Office Address Same

. . .

Attorney Docket No.: 14423US01

Previous Docket No.: DN 36649XZD

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the Application of:

Steven E. Koenck

09/467,255

Filed:

Serial No.:

12/20/1999

For:

Multi-Level Hierarchical Radio-

Frequency System Communication

System

Examiner: DANIEL ST CYR

Group Art Unit: 2876

Conf. No.: 2134

POWER OF ATTORNEY BY ASSIGNEE OF ENTIRE INTEREST, REVOCATION OF PRIOR POWERS AND CHANGE OF CORRESPONDENCE ADDRESS

Commissioner for Patents Washington, D.C. 20231

Dear Sirs:

This correspondence constitutes a Power of Attorney by Assignee of Entire Interest, Revocation of Prior Powers and Change of Correspondence Address, and an Assignee Statement Under 37 C.F.R. §3.73(b), for the above-identified application.

Please charge any required fees to the deposit account of McAndrews, Held & Malloy, Ltd. Account No. 13-0017.

Respectfully submitted,

Date: April 22, 2003

Timothy L. Harriey Reg. No. 38,174

McANDREWS, HELD & MALLOY, LTD. 500 West Madison Street Suite 3400 Chicago, Illinois 60661 (312) 775-8000

We, Broadcom Corporation, are the assignee of record in all the patents/patent applications identified in Exhibits A and B, which are attached hereto and incorporated herein in their entirety. As assignee of record of the entire interest of the identified patents/patent applications, we hereby revoke all powers of attorney previously given in such patents/patent applications, and appoint the following attorney(s) and/or agent(s) to prosecute and transact all business in the Patent and Trademark Office connected with such patents/patent applications.

Sandra A. Frantzen Ronald H. Spuhler Christopher V. Carani Jennifer E. Lacroix Joseph F. Harding Joseph M. Butscher Troy A. Groetken Sara J. Bartos John A. Wiberg John Abramic David Z. Petty Michael T. Cruz David Muzilla Christopher N. George	Reg. No. 48,799 Reg. No. 52,245 Reg. No. 44,049 Reg. No. 46,852 Reg. No. 48,450 Reg. No. 46,442 Reg. No. 51,439 Reg. No. 51,031 Reg. No. 52,119 Reg. No. 52,119 Reg. No. 50,914 Reg. No. 50,914 Reg. No. 51,728
Christopher N. George Kevin Borg Mirut Dalal	Reg. No. 51,728 Reg. No. 51,486 Reg. No. 44,052

CHANGE OF CORRESPONDENCE ADDRESS

Please send correspondence and direct telephone calls to the following:

Christopher C. Winslade McAndrews, Held & Malloy 500 W. Madison Street Suite 3400 Chicago, IL 60661 (312) 775-8000

ASSIGNEE STATEMENT UNDER 37 C.F.R. § 3.73(b)

We herby state that we are the assignee of the entire right, title and interest in the patents/patent applications identified in Exhibits A and B. A copy of a previously filed Assignment document evidencing transfer of title to Broadcom Corporation is attached hereto as Exhibit C and incorporated herein in its entirety.

William J Ruehle

(type or print name of person authorized to sign on behalf of assignee)

VP & CFO
Title

NOTE: The assignee of the entire interest may revoke previous powers and be represented by an attorney of his or her selection. 37 C.F.R. §1.36.

Exhibit A Assigned Patents

Docket No==	Patent No	Country	Tue	Issue Dâte	Inventor(s) 5 2 5 5
36500 14431US01	4910794	US	Mobile Radio Data Communication System & Method	03/20/1990	Ronald	Mahany
37139 14779US01	5052020	US	Method of and Apparatus for Controlling Modulation of Digital Signals in Frequency-Modulated Transmissions	09/24/1991	Steven Ronald	Koenck Mahany
36500X 14382US01	5070536	US	Mobile Radio Data Communication System and Method	12/03/1991	Guy Marvin Ronald	West Sojka Mahany
36767XY 14383US01	5202817	US	Hand-Held Data Capture System With Interchangeable Modules	04/13/1993	Arvin Robert William Dennis Steven Ronald Phillip George Keith Darrald Darrell	Danielson Geers Gibbs Durbin Koenck Mahany Miller Hanson Cargin, Jr. Schultz Boatwright
36767XZ 14439US01	5218187	US .	Hand-Held Data Capture System with Interchangeable Modules	06/08/1993	Jeffrey Darald George Steven Phillip	Krunnfusz Schultz Hanson Koenck Miller
37882X 14444US01	5295154	US	Radio Frequency Local Area Network	03/15/1994	Robert	Meier
36767YXX 14341US01	5313053	US	Laser Scanner Module Having Integral Interfacing with Hand-Held Data Capture Terminal	05/17/1994	George Phillip Darald Jeffrey Steven	Hanson Miller Schultz Krunnfusz Koenck
36767XZX 14340US01	5331136	UŞ	Hand-Held Data Capture System with Interchangeable Modules	07/19/1994	George Phillip Darald Jeffrey Steven	Hanson Miller Schultz Krunnfusz Koenck

Docket No	Patent No	Country	mile	Issue Date	Inventor() Para Para
37139XX 14803US01	5365546	US;	Method of and Apparatus for Controlling Modulation of Digital Signals in Frequency Modulated Transmissions	11/15/1994	William Ronald Steven	Frede Mahany Koenck
37882YC 14777US01	5394436	US	Radio Frequency Local Area Network	02/28/1995	Robert Ronald Ronald	Meier Mahany Luse
36625X 14342US01	4,924,462	US	Multiterminal Communication System and Method	01/03/1989	Marvin Sc	jka
36767XYA/B 14386US01	5418684	US	Hand-Held Data Capture System with Interchangeable Modules	05/23/1995	George Steven Ronald Keith Arvin Darald Dennis Robert William Darrell Phillip	Hanson Koenck Mahany Cargin, Jr. Danielson Schultz Durbin Geers Gibbs Boatwright Miller
37834ZX 14402US01	5425051	US ·	Radio Frequency Communication Network Having Adaptive Parameters	06/13/1995	Ronald	Mahany
37882XA 14400US01	5428636	US	Radio Frequency Local Area Network	06/27/1995	Robert	Meier
36500XXX 14369US01	5483676 ·	US	Mobile Radio Data Communication System and Method	01/09/1996	Marvin Guy Ronald	Sojka West Mahany
INT094-04 14209US01	5495500	US	Homodyne Radio Architecture for Direct Sequence Spread Spectrum Data Reception	02/27/1996	Alan	Jovanovich
37972C 14233US01	5500872	US	Spread Spectrum Base Band Processor	03/19/1996	Ronald Patrick Steven	Mahany Kinney Koenck
37882YAX 14773US01	5504746	US	Radio Frequency Local Area Network	04/02/1996	Robert	Meier
36808XYC 14346US01	5515303	US	Hand-held Computerized Data Collection Terminal with Rechargeable Battery Pack Sensor and Battery Power Conservation	05/07/1996	Darrell William Keith Ronald Dennis Darald	Boatwright Gibbs Cargin, Jr. Mahany Durbin Schultz

DockerNo .	Patent No	Country	Trile	Issue Date	Inventor(
36767XYC 14381US01	5530619	US _i	Hand-held Data Capture System with Interchangeable Modules and Side-Mounted Function Key	06/25/1996	Ronald Dennis William George Arvin Keith Darald Robert Steven Darrell Phillip	Mahany Durbin Gibbs Hanson Danielson Cargin, Jr. Schultz Geers Koenck Boatwright Miller
37940E 14350US01	5539193	US	Modular Hand-Held Data Entry System	07/23/1996	Darrell Keith Arvin Richard Glen Steven Dennis George Ronald Robert Darald William Phillip James	Boatwright Cargin, Jr. Danielson Arensdorf Adams Koenck Durbin Hanson Mahany Geers Schultz Gibbs Miller Hutton
37940F 14779US01	5539194	US	Modular Hand-Held Data Entry System	07/23/1996	Darald George Phillip Steven Glen Dennis Ronald William Robert Richard Arvin Keith James Darrell	Schultz Hanson Miller Koenck Adams Durbin Mahany Gibbs Geers Arensdorf Danielson Cargin, Jr. Hutton Boatwright
38050B 14403US01	5546397	US	High Reliability Access Point for Wireless Local Area Network	08/13/1996	Ronald	Mahany
37139XXA 14783US01	5555276	US	Method of and Apparatus for Controlling Modulation of Digital Signals in Frequency - Modulated Transmissions	09/10/1996	Ronald William Steven	Mahany Frede . Koenck

Docket No	Patent No	Country	Title	Issue Date	Inventor(s	
INT093-49 14338US01	5565670	US;	Cordless RF Link for Bar Code Input Device Modulating Impulses Corresponding to Data State Transitions	10/15/1996	John	Flaherty
36767XZXX 14774US01	5567925	US	Hand-Held Data Capture System with Interchangeable Modules	10/22/1996	Darald George Jeffrey Phillip Steven	Schultz Hanson Krunnfusz Miller Koenck
37998XB 14391US01	5574979	US ·	Periodic Interference Avoidance in a Wireless Radio Frequency Communication System	11/12/1996	Guy ·	West
38017 14370US01	5590346	US	Antenna Cap for Computer Device Utilizing a Radio Card	12/31/1996	Guy Ronald	West Mahany
INT093-09C 14371US01	5602380	US	Barcode Scanner-Reader Wireless Infrared Link	02/11/1997	Jon	Bishay
37967B 14392US01	5602854	US	Wireless Personal Local Area Network Utilizing Removable Frequency Modules with Digital Interfaces and Idle Sense Communication Protocol	02/11/1997	Charles Ronald Guy Ronald	Gollnick Luse West Mahany
INT090-05C 14399US01	5610595	US	Packet Radio Communication System Protocol	03/11/1997	Gary Joseph Jay	Garrabrant Savarese Cho
38157 14404US01	5627412	US	Dynamically Switchable Power Supply	05/06/1997	Paul	Beard
37998XD 14405US01	5657317	US	Hierarchical Communication System using Premises, Peripheral and Vehicular Local Area Networking	08/12/1997	Ronald Guy	Mahany West
37882AXX 14375US01	5673031	US	Redundant Radio Frequency Network Having a Roaming Terminal Communication Protocol	09/30/1997	Robert	Meier
37977B 114784US01	5679943	US	Hand-Held Terminal with Display Screens, Interactive Screens, Magnetic Credit Card Readers, Scanners, Printers and Handlers	10/21/1997	John Darald Steven Mark	Rohde Schultz Koenck Rasmussen
36767XZAB. 14786US01	5680633	US	Modular, Portable Data Processing Terminal for use in a Radio Frequency Communication Network	10/21/1997	Patrick Guy Steven Ronald Phillip	Kinney West Koenck Mahany Miller

	Data Santa					
Docket No.	Patent No	man manangan manan		Issue Date	Inventor(N. TI. SI CHETICAL PRINTED OF THE
37967C 14414US01	5682379	US;	Wireless Personal Local Area Network	10/28/1997	Charles Guy Ronald Ronald	Gollnick West Luse Mahany
37998G 14772US01	5696903	US	Hierarchical Communications System using Microlink, Data Rate Switching, Frequency Hopping and Vehicular Local Area Networking	12/09/1997	Ronald	Mahany
INT094-11 14394US01	5703950	US	Method and Apparatus for Controlling Country Specific Frequency Allocation	12/30/1997	Duane Steven Alan	Charron Duke Jovanovich
37834YYB 14347US01	5708680	US	Network Utilizing a Controller and Base Transceivers to Route Voice Packets	01/13/1998	Charles Ronald Marvin Richard Ronald Mary Keith James John Amos Guy Gary Arvin	Gollnick Mahany Sojka Arensdorf Luse Detweiler Cargin, Jr. Chossen Pavek Young West Spiess Danielson
38000FB 14390US01	5708833	US	Antenna Cap, Antenna Connectors and Telephone Line Connectors for Computer Devices Utilizing Radio and Modem Cards	01/13/1998	Guy Ronald Patrick	West Mahany Kinney
37998XG 14776US01	5726984	US	Hierarchical Data Collection Network Supporting Packetized Voice Communications Among Wireless Terminals and Telephones	03/10/1998	Joseph Michael	Kubler Morris
38099A 14368USÒ1	5734585	US	Method and Apparatus for Sequencing Power Delivery in Mixed Supply Computer Systems	03/31/1998	Paul .	Beard
37882YD 14417US01	5740366	US ·	Communication Network Having a Plurality of Bridging Nodes which Transmit A Beam to Terminal Nodes in Power Saving State that it Has Messages Awaiting Delivery	04/14/1998	Ronald Ronald Robert	Mahany Luse Meier
36808YXCB 14440US01	5747786	US	Communication Module for a Data Capture System	05/05/1998	Dennis Darrell Ronald Darald Keith	Durbin Boatwright Mahany Schultz Cargin, Jr.

and the first of the state of t	Marca a series and a series	A CARTE DESIGN			Professional Property	
Docket No -	Patent No.	Country	Title	Issue Date	Inventor(5) 23-25-4-32
38009EA 14373US01	5748619	US;	Communication Network Providing Wireless and Hard-Wired Dynamic Routing	05/05/1998	Robert	Meier
38072 14377US01	5748676	US	Network Utilizing Modified Preambles that Support Antenna Diversity	05/05/1998	Ronald	Mahany
37998XE 14393US01	5790536	US	Hierarchical Communication System Providing Intelligent Data, Program and Processing Migration	08/04/1998	Guy Ronald Michael Robert Arvin	West Mahany Morris Meier Danielson
36837E 14441US01	5805807	US	Multilevel Data Communication System Including Local and Host Systems	09/08/1998	Ronald Arvin Phillip Guy Keith George Steven Steven	Mahany Danielson Miller West Cargin, Jr. Hanson Koenck Salvay
37834YYA 14434US01	5844893	US .	System for Coupling Host Computer Meanswith Base Transceiver Units on a Local Area Network	12/01/1998	Keith Marvin Mary Robert Guy Gary John Ronald Arvin Richard Amos Charles James Ronald	Cargin, Jr. Sojka Detweiler Geers West Spiess Pavek Mahany Danielson Arensdorf Young Gollnick Chossen Luse
37834ZXA 14234US01	5862171	US	Radio Frequency Communication Network Having Adaptive Communication Parameters	01/19/1999	Ronald	Mahany
38017A 14437US01	5870279	US	Antenna Cap for Computer Device Utilizing a Radio Card	02/09/1999	Guy Ronald	West Mahany
38066X 14800US01	5880867	US	Infrared Backbone Communication Network Having a Radio Frequency Backup Channel	03/09/1999	Ronald	Mahany
38066A 14804US01	5880868	US	Infrared Backbone Communication Network Having a Radio Frequency Backup Channel	03/09/1999	Ronald	Mahany

DockenNo	Patent No.	Country	Title	Issue Date:	Inventor(s	
36500YZCXA 14436US01	5896561	US;	Communication Network Having a Domnant Polling Protocol	04/20/1999	Steve Ronald	Schrader Mahany
36767XYD 14385US01	5898162	US	Hand-Held Data Capture System with Interchangeable Module	04/27/1999	Dennis Darrell William Robert George Phillip Steven Ronald Keith Arvin Darald	Durbin Boatwright Gibbs Geers Hanson Miller Koenck Mahany Cargin, Jr. Danielson Schultz
INT096-32 14395US01	5912921	US	Concurrent Multiple Data Rate Communications in a Wireless Local Area Network	06/15/1999	John Alan	Mensonides Jovanovich
37139XXB 14435US01	5912926	US .	Method and Apparatus for Controlling Modulation of Digital Signals in Frequency Modulated Transmissions	06/15/1999	Ronald Steven William	Mahany Koenck Frede
37940G 14432US01	5917175	US	Modular Hand-Held Data Entry System with Voice Interface	06/29/1999	Ronald Steven George William Arvin Darrell Dennis Phillip Darald Keith Robert	Mahany Koenck Hanson Gibbs Danielson Boatwright Durbin Miller Schultz Cargin, Jr. Geers
NT094-11C 14390US01	5940509	US	Method and Apparatus for Controlling Country Specific Frequency Allocation	08/17/1999	Steven Duane Alan	Duke Charron Jovanovich

Docket No Fa	Patent No.	Country	Tritle	Issue Date	lnventor(
37834XXBX 14413US01	5940771	US	Network Supporting Roaming, Sleeping Terminals	08/17/1999	Mary Guy Ronald Keith Richard Ronald Robert Charles James Arvin Gary Marvin John Amos	Detweiler West Luse Cargin, Jr. Arensdorf Mahany Meier Geers Gollnick Chossen Danielson Spiess Sojka Pavek Young
INT096-30 14384US01	5946344	US	Multiple-Rate Direct Sequence Architecture Utilizing a Fixed Chipping Rate and Variable Spreading Code Lengths	08/31/1999	Alan John Duane	Jovanovich Mensonides Charron
37998XDA 14412US01	5949776	US	Hierarchical Communication System using Premises, Peripheral and Vehicular Local Area Networking	09/07/1999	Ronald Guy	Mahany West
38050BAY 14397US01	5960344	US	Local Area Network Having Multiple Channel Wireless Access	09/28/1999	Ronald	Mahany
INT096-25 14372US01	5982812	US	Method and Apparatus for Monitoring Frequency Synthesizer Locking Time	11/09/1999	John Alan	Mensonides Jovanovich
38190R 14343US01	5990733	US	Delay Line Ramp Demodulator	11/23/1999	Ronald Tom	Mahany Schuster
38000EA 14802US01	5991864	US	Power Connectors, Antenna Connectors and Telephone Line Connectors for Computer Devices Utilizing Radio and Modem Cards	11/23/1999	John Ronald Patrick	Mallard Mahany Kinney
INT097-06 14212US01	6005530	US	Switched Gain Antenna for Enhanced System Performance	12/21/1999	John Alan	Mensonides Jovanovich
INT095-35 14401US01	6005885	US	Methodology for Discontinuous Radio Reception Utilizing Embedded Frame Length Words	12/21/1999	Alan John	Jovanovich Mensonides

					I STATE OF THE PROPERTY OF THE	
Docket No.	Patent No.	Country	Tile	Issue Date	Inventor(s) (2) (3)
36649XZC 14433US01	6006100	US,	Multi-Level, Hierarchical Radio- Frequency Communication System	12/21/1999	Steven George Keith Arvin Steven Phillip Ronald Guy	Salvay Hanson Cargin, Jr. Danielson Koenck Miller Mahany West
INT096-29 14210US01	6009119	US	Adaptive Power Leveling of an RF Transceiver Utilizing Information Stored in Non-Volatile Memory	12/28/1999	John Alan	Mensonides Jovanovich
36767XZAC 14415US01	6014705	US	Modular Portable Data Processing Terminal Having A Higher Layer and Lower Layer Partitioned Communication Protocol Stack for use in a Radio Frequency Communication Network	01/11/2000	Guy Patrick Steven Ronald Phillip	West Kinney Koenck Mahany Miller
38072A 14213US01	6018555	US	Network Utilizing Modified Preambles that Support Antenna Diversity	01/25/2000	Ronald	Mahany
36808YXCD . 14775US01	6023147	US,	Hand-Held Computerized Data Collection Terminal with Rechargeable Battery Pack Sensor and Battery Power Conservation	02/08/2000	Darrell Darald Keith Dennis Ronald William	Boatwright Schultz Cargin, Jr. Durbin Mahany Gibbs
37882YAYA 14389US01	6046992	US	A Radio Frequency Local Area Network	04/04/2000	Robert Ronald	Meier Luse
INT096-31 14438US01	6075807	US	Windowed Digital Matched Filter Circuit for Power Reduction in Battery- Powered CDMA Radios	06/13/2000	John Alan	Mensonides Jovanovich
37882XBA 14387US01	6084867	US	Apparatus and Method of Routing Data in a Radio Frequency Local Area Network	07/04/2000	Robert	Meier
INT094-03C2 14388US01	6118807*	US	Methodology For Received Signal Enhancement Utilizing Delay Diversity Processing	09/12/2000	Alan Bruce Frank	Jovanovich WARREN PERGAL
38340R1 14416US01	6172712	US	Television with Hard Disk Drive	01/09/2001	Paul	Beard

^{&#}x27;This patent is transferred on an "as-is" basis by Intermec and may be subject to third party co-ownership claims.

Docket No	PatentNo	College	Title	Icola Dalas	Inventori	V-52-3-3-2-
36837EA	6192400	US,	Multilevel Data Communication System	Issue Date 02/20/2001	Guy) west
14380US01	0172400	007	Including Local and Host Systems	02/20/2001	Steven	Salvay
					Ronald	Mahany
					Arvin .	Danielson
			•	•	Phillip	Miller
					George Steven	Hanson Koenck
				•	Keith	Cargin, Jr.
		=				
36767XYE	6244512	US	Hand-Held Data Capture System with	06/12/2001	Arvin	Danielson
14351US01			Interchangeable Modules		Ronald	Mahany
					Darald Phillip	Schultz Miller
					Steven	Koenck
			,		Darrell	Boatwright
					George	Hanson
					Keith	Cargin, Jr.
					Robert	Geers
			·		William Dennis	Gibbs Durbin
					Deimis	Durom
38234RX	6281850	US	Broadband Multiple Element Antenna	08/28/2001	Daniel	Klostermann
14780US01			System			
						• .
INT097-02	6320896	US	RF Receiver Having Frequency-	11/20/2001	Alan	Jovanovich
14439US01			Hopping/Direct-Sequence Spread		John	Mensonides
			Spectrum Signal Discrimination			
INT097-03	6327312	US	RF Narrowband/Wideband	12/04/2001	Alan	Jovanovich
14396US01		•	Discriminating System for Spread Spectrum Signal Differentiation		John	Mensonides
37967CA	6359872	US	Wireless Personal Local Area Network	03/19/2002	Donald	Moham
14427US01	. 0339612	US	Wheless Fersonal Local Area Network	03/19/2002	Ronald Guy	Mahany West
					Charles	Gollnick
					Ronald	Luse
2700270	6274211	TIC	Padio Espanona I coal A New da	04/16/2002	D = -1-1) (- 1
37882YE 14374US01	6374311	US	Radio Frequency Local Area Network	04/16/2002	Ronald Ronald	Mahany Luse
143740801					Robert	Meier
37998XGA	6389010	ÚS	Hierarchical Data Collection Network	05/14/2002	Joseph	Kubler
14379US01			Supporting Packetized Voice		Michael	Morris
			Communications Among Wireless Terminals and Telephones			
37882XBB	6400702	US	A Radio Frequency Local Area Network	06/04/2002	Robert	Meier
	0.00702		Traductor Book Files Notwork	30/37/200Z	RODGIL	1410101

Docker No.	Patent Nos	Country	Time	Issue Date	Inventor	s) = 1 = 1 = 5 = 5
38009EBA 14344US01	6407991.	US;	Communication Network Providing Wireless and Hard-Wired Dynamic Routing	06/18/2002	Robert	Meier

Exhibit B

Assigned Patent Applications

Docket No	Serial No	Country	Title	Filing Date	Inventor(
36500ZXD 14419US01	10/057816	US	Remote Radio Data Communication System with Data Rate Switching	01/24/2002	Ronald	Mahany
38127 14425US01	08/513658	US	Modular, Portable Data Processing Terminal For use in a Communication Network	08/11/1995	Phillip Robert Ronald Patrick Steven	Miller Meier Mahany Kinney Koenck
38050BB 14418US01	09/357429	US	Local Area Network Having Multiple Channel Wireless Access	07/20/1999	Ronald	Mahany
38157XA 14421US01	09/735406	US	Battery Powered Device with Dynamic Power and Performance Management	12/12/2000	Paul	Beard
37882AAYC 14420US01	09/960265	US	Redundant Radio Frequency Network Having a Roaming Terminal Communication Protocol	09/21/2001	Robert	Meier
38163AY 14211US01	08/973195	US	Spread Spectrum Transceiver Module Utilizing Multiple Mode Transmission	03/06/2000	Ronald .	Mahany
37967X 14426US01	08/499328	US	Transaction Control System Including Portable Data Terminal and Mobile Customer Service Station	07/07/1995	George Roger Robert Ronald Phillip Steven	Hanson Wolf Meier Mahany Miller Koenck
38000FBA 14208US01	09/006566	US	Antenna Cap, Antenna Connectors and Telephone Line Connectors for Computer Utilizing Radio and Modem Cards	01/13/1998	Guy Ronald Patrick	West Mahany Kinney
37998XEB 14409U01	09/723930	US	Hierarchical Communications System	11/28/2000	Ronald	Mahany
Market April 10 The same constraint of a		n Hartman Hall sufranti	ن ويون والد و الله و	The state of the s		

Docket No.	Serial No	Country	Title 28 # 14	Elling Date	Inventor(s	
37967XA 14204US01	09/123875	US	Enhanced Mobility and Address Resolution in a Wireless Premises Based Network	07/28/1998	Steven Ronald Steven Charles George Roger Guy Ronald Keith Arvin Phillip Robert	Salvay Mahany Koenck Gollnick Hanson Wolf West Luse Cargin, Jr. Danielson Miller Meier
37834YY1 14408US01	09/972749	US	System for Coupling a Multiplicity of RF Data Collection Terminals with Host Computer Means	10/08/2001	Ronald Ronald Amos Guy Marvin Charles Robert Mary Arvin James Keith Richard John Gary	Mahany Luse Young West Sojka Gollnick Geers Detweiler Danielson Chossen Cargin, Jr. Arensdorf Pavek Spiess
37834ZXC 14422US01 14422US02	09/799340	US	Radio Frequency Communication Network Having Adaptive Communication Parameters	03/05/2001	Ronald	Mahany
36649XZD 14423US01	09/467255	US	Multi-Level, Hierarchical Radio-Frequency Communication System	12/20/1999	Keith Phillip Ronald Steven Steven George Guy Arvin	Cargin, Jr. Miller Mahany Salvay Koenck Hanson West Danielson
36767XZAE 14410US01	09/597917	US	Modular Portable Data Processing Terminal for use in a Radio Frequency Communication Network	06/19/2000	Steven Guy Ronald Phillip Patrick	Koenck West Mahany Miller Kinney
37882YAYB 14771US01	09/542424	US	A Radio Frequency Local Area Network	04/04/2000	Robert	Meier

DocketNo	Serial No 2	Country	Title	Riling Date	Inventor(
38477RX 14424US01	09/954520	US	Integrated Cable Modem and Cable Television Management System	09/17/2001	Daniel Michael	Bishop Morris
37967CAA 14407US01	10/101436	US	Wireless Personal Local Area Network	03/19/2002	Charles Ronald Guy Ronald	Gollnick Mahany West Luse
37882YEA 14406US01	10/123873	US	Radio Frequency Local Area Network	04/16/2002	Ronald Robert Ronald	Luse Meier Mahany
37998XGB 14364US01	10/141506	US	Hierarchical Data Collection Network Supporting Packetized Voice Communications Among Wireless Terminals and Telephones	05/08/2002	Michael Joseph	Morris Kubler
37882XBC 14236US01	10/162229	US	Radio Frequency Local Area Network	06/04/2002	Robert	Meier
38009EBB 14207US01	10/144250	US	Communication Network Providing Wireless and Hard- Wired Dynamic Routing	05/13/2002	Robert .	Meier
37834XXBY 14206US01	09/318668	US	Network Supporting Roaming, Sleeping Terminals	05/25/1999	Ronald Ronald Amos Guy Marvin Charles Robert Mary Arvin James Keith Richard John Gary Robert	Mahany Luse Young West Sojka Gollnick Geers Detweiler Danielson Chossen Cargin, Jr. Arensdorf Pavek Spiess Meier
36808XYE 14231US01	08/921485	US	Hand-Held Computerized Data Collection Terminal		Alfred Jeremy	Koelle Landt

36767XB 14366US01	08/478,488	US	Hand-Held Data Capture System with Interchangeable Modules	06/07/95	Steven Phillip Arvin Ronald Dennis Keith George Darald Robert Darrel William Stephen	Koenck Miller Danielson Mahany Durbin Cargin Hanson Schultz Geers Boatwright Gibbs Kelly
38477R1 14411US01	09/805,589	US	Integrated Cable Modem and Cable Television Management System	03/13/01	Daniel Michael	Bishop Morris
			isteriori del como de la como de l			(a)

ASSIGNMENT

THIS ASSIGNMENT is made and effective as of the 24th day of December, 2002. by INTERMEC IP CORP. (hereinafter referred to as the "ASSIGNOR"), a company organized and existing under the laws of Delaware, having a principal place of business at 21900 Burbank Boulevard, Woodland Hills, CA 91367.

WITNESSETH

WHEREAS, said ASSIGNOR is the owner of the entire right, title and interest in and to the Patent Applications and Patents in the United States of America and other foreign countries, set forth in Attachment A hereto;

WHEREAS, BROADCOM CORPORATION, a company organized and existing under the laws of Delaware, having a principal place of business at 16215 Alston Parkway, Irvine, California 92619, (the "ASSIGNEE") is desirous of acquiring the entire right, title and interest in and to such Patents Applications and Patents, both from the United States and foreign.

Now therefore, in exchange for receipt of good and sufficient consideration, the receipt and sufficiency of which is hereby acknowledged, and as agreed to by the ASSIGNEE and ASSIGNOR, ASSIGNOR hereby assigns and transfers to ASSIGNEE and ASSIGNEE accepts, all of the rights, title and interest of ASSIGNOR throughout the World in and to any and all inventions claimed or disclosed in such Patents and Patent Applications which are set forth and listed in Attachment A hereto.

This Assignment includes all of ASSIGNOR's right, title and interest in, to and under each of the Patent Applications and Patents set forth and listed in Attachment A hereto (including, without limitation, rights to damages and payments for past, present or future infringements or misappropriations), and, as agreed between the parties, all continuations, continuations-in-part, divisionals, substitute, reexaminations, post-opposition foreign counterpart patents, and applications, reissues and extensions thereof, if any; and, ASSIGNOR requests the Commissioner of Patents of the United States (and all foreign officials, whose duty it is to issue patents on applications as aforesaid) to record ASSIGNEE as the owner of such Patent or Application, to the same extent as held by ASSIGNOR, and to issue the Letters Patent for said Patents to be in the name of the said ASSIGNEE, as an assignee of the Patents.

County of Orange)
State of California)
On January 17, 2003, before me, Virginia Lee Nowicki, Hotanfully personally
appeared William J Ruehle, personally known to me to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in hisher authorized capacity, and that by hisher signature on the instrument, the entity upon
behalf of which he/she acted, executed the instrument. WITNESS my hand and official seal:
NOTARY PUBLIC
VIRGINIA LEE NOWICKI Commission # 1313422 Notary Public - California Orange County My Corrn. Expires Aug 10, 2005

ATTACHMENT A

Docket No	Patenta Seria	L Country	Notice 1
	NO.		
36500	4910794	US.	Mobile Radio Data Communication System & Method
36500ZXD	10/05781	6 US	Remote Radio Data Communication System with Data Rate Switching
36625X	4924462	US	Multiterminal Communication System and Method
37139	5052020 :	US	Method of and Apparatus for Controlling Modulation of Digital Signals in Frequency-Modulated Transmissions
37139X/CA	2074169	CA	Method of and Apparatus For Controlling Modulation of Digital Signals in Frequency-Modulated Transmissions
36500X	5070536	US	Mobile Radio Data Communication System and Method
	1316218	CA	Mobile Radio Data Communication System and Method
	2223914	GB	Mobile Radio Data Communication System and Method
36767XY	5202817	US	Hand-Held Data Capture System With Interchangeable Modules
36767XZ	5218187	US	Hand-Held Data Capture System with Interchangeable Modules
and the state of t	678135	AU	Hand-Held Data Capture System with Interchangeable Modules
	69231057.6	. DE	Hand-Held Data Capture System with Interchangeable Modules
	573567	GB	Hand-Held Data Capture System with Interchangeable Modules
	21047	88 CA	Hand-Held Data Capture System with Interchangeable Modules
	573567	FR	Hand-Held Data Capture System with Interchangeable Modules
37882X	5295154	US	Radio Frequency Local Area Network
36767YXX	5313053	US	Laser Scanner Module Having Integral Interfacing with Hand-Held Data Capture Terminal
36767XZX	5331136	US	Hand-Held Data Capture System with Interchangeable Modules
38127	08/51365	S8 US	Modular, Portable Data Processing Terminal For use in a Communication Network
37139XX	5365546	. US	Method of and Apparatus for Controlling Modulation of Digital Signals in Frequency Modulated Transmissions
37882YC	5394436	US	Radio Frequency Local Area Network
36767XB	08/47848	88 US	Hand-Held Data Capture System with Interchangeable Modules
36767XYA	5418684	บร	Hand-Held Data Capture System with Interchangeable Modules
37834ZX	5425051	US	Radio Frequency Communication Network Having Adaptive Parameters
37882XA	5428636	US	Radio Frequency Local Area Network
36500XXX	5483676	US	Mobile Radio Data Communication System and Method
INT094-04	5495500	US	Homodyne Radio Architecture for Direct Sequence Spread Spectrum Data Reception
37972C	5500872	US	Spread Spectrum Base Band Processor

DocketNo	Patent No	Serial P	Country	Title .
37882YAX	5504746		US	Radio Frequency Local Area Network
DN 37882YPCT		02012917.7	EP	Radio Frequency Local Area Network
	664864	4 .	AU .	Radio Frequency Local Area Network
	701114	4	ΔŪ	Radio Frequency Local Area Network
36808XYC	5515303		US	Hand-held Computerized Data Collection Terminal with Rechargeable Battery Pack Sensor and Battery Power Conservation
36808XYE		08/921485	· US	Hand-Held Computerized Data Collection Terminal
36767XYC	5530619		US	Hand-held Data Capture System with Interchangeable Modules and Side-Mounted Function Key
37940E	5539193		· US	Modular Hand-Held Data Entry System
37940F	5539194		US	Modular Hand-Held Data Entry System
38050B	5546397		US	High Reliability Access Point for Wireless Local Area Network
38050BB	<u> </u>	09/357429	US	Local Area Network Having Multiple Channel Wireless Access
37139XXA	5555276	,	US	Method of and Apparatus for Controlling Modulation of Digital Signals in Frequency - Modulated Transmissions
INT093-49	5565670		US :	Cordless RF Link for Bar Code Input Device Modulating Impulses Corresponding to Data State Transitions
36767XZXX ·	5567925		US -	Hand-Held Data Capture System with Interchangeable Modules
37998XB	5574979	:	US	Periodic Interference Avoidance in a Wireless Radio Frequency Communication System
38017	5590346		US	Antenna Cap for Computer Device Utilizing a Radio Card
INT093-09C	5602380		US	Barcode Scanner-Reader Wireless Infrared Link
37967B	5602854		US .	Wireless Personal Local Area Network Utilizing Removable Frequency Modules with Digital Interfaces and Idle Sense Communication Protocol
INT090-05C	5610595	·	US	Packet Radio Communication System Protocol
38157	5627412		US	Dynamically Switchable Power Supply
38157XA	=	09/735406	US	Battery Powered Device with Dynamic Power and Performance Management
37998XD	5657317		US	Hierarchical Communication System Using Premises, Peripheral and Vehicular Local Area Networking
37882AXX	5673031		· US	Redundant Radio Frequency Network Having a Roaming Terminal Communication Protocol
37882AAYC		09/960265	US	Redundant Radio Frequency Network Having a Roaming Terminal Communication Protocol
37977B	5679943	·	US '	Hand-Held Terminal with Display Screens, Interactive Screens, Magnetic Credit Card Readers, Scanners, Printers and Handlers
36767XZAB	5680633		US	Modular, Portable Data Processing Terminal for use in a Radio Frequency Communication Network

	Martin ac			
Docket No	PatentNo	Serial No.	Country	Title
38163AY		08/973195	US.	Spread Spectrum Transceiver Module Utilizing Multiple Mode Transmission
37967C	5682379		US .	Wireless Personal Local Area Network
٠.	696841		AU ·	Wireless Personal Local Area Network
	. '	2152598	CA	Wireless Personal Local Area Network
	٠	94905966.1	EP	Wireless Personal Local Area Network
37967X	· ·	08/499328	US ·	Transaction Control System Including Portable Data Terminal and Mobile Customer Service Station
37998G	5696903		US	Hierarchical Communications System using Microlink, Data Rate Switching, Frequency Hopping and Vehicular Local Area Networking
INT094-11	5703950		US	Method and Apparatus for Controlling Country Specific Frequency Allocation
37834YYB	5708680		US	Network Utilizing a Controller and Base Transceivers to Route Voice Packets
38000FB	5708833		US	Antenna Cap, Antenna Connectors and Telephone Line Connectors for Computer Devices Utilizing Radio and Modem Cards
38000FBA		09/006566	US	Antenna Cap, Antenna Connectors and Telephone Line Connectors for Computer Utilizing Radio and Modern Cards
37998XG	5726984		US	Hierarchical Data Collection Network Supporting Packetized Voice Communications Among Wireless Terminals and Telephones
38099A	5734585		US	Method and Apparatus for Sequencing Power Delivery in Mixed Supply Computer Systems
37882YD	5740366		US	Communication Network Having a Plurality of Bridging Nodes which Transmit A Beam to Terminal Nodes in Power Saving State that it Has Messages Awaiting Delivery
36808YXCB	5747786		US	Communication Module for a Data Capture System
38009EA	5748619		. US	Communication Network Providing Wireless and Hard-Wired Dynamic Routing
in in the contract of the cont	679593	3	AU ·	Communication Network Providing Wireless and Hard-Wired Dynamic Routing
38000G/EP		94916663.1	EP	Multiple Antenna Selection and Antenna Cap for Computer Devices Utilizing Radio and Modern Cards
38072	5748676		US	Network Utilizing Modified Preambles that Support Antenna Diversity
37998XE	5790536		US	Hierarchical Communication System Providing Intelligent Data, Program and Processing Migration
	700800)	. AU .	Hierarchical Communication System Providing Intelligent Data, Program and Processing Migration
Number 1	715628	· . ,	AU	Hierarchical Communication System Providing Intelligent Data, Program and Processing Migration
37998XE/EP		95927421.8	EP.	Hierachical Communication System Providing Intelligent Data Program

			France (4)	
Docket No	PatentNo	Serial Sy No	Country	Title
Plane Property and Constitution of the Constit	100000000000000000000000000000000000000		A THE STATE OF THE	and Processing Migration
37998XEB		09/723930	·US	Hierarchical Communications System
37967XA		09/123875	US	Enhanced Mobility and Address Resolution in a Wireless Premises Based Network
36837E	5805807		US	Multilevel Data Communication System Including Local and Host Systems
37834YYA	5844893		US ·	System for Coupling Host Computer Meanswith Base Transceiver Units on a Local Area Network
37834YY1		09/972749	US.	System for Coupling a Multiplicity of RF Data Collection Terminals with Host Computer Means
37834ZXA	5862171		. US	Radio Frequency Communication Network Having Adaptive Communication Parameters
37834ZXC		09/799340	US	Radio Frequency Communication Network Having Adaptive Communication Parameters
38017A	5870279		US	Antenna Cap for Computer Device Utilizing a Radio Card
38066X	. 5880867		US	Infrared Backbone Communication Network Having a Radio Frequency Backup Channel
38066A	5880868		· US	Infrared Backbone Communication Network Having a Radio Frequency Backup Channel
36500YZCXA	5896561		US	Communication Network Having a Dormant Polling Protocol
36767XYD	5898162		US	Hand-Held Data Capture System with Interchangeable Module
INT096-32	5912921		US	Concurrent Multiple Data Rate Communications in a Wireless Local Area Network
37139XXB	5912926	:	: US	Method and Apparatus for Controlling Modulation of Digital Signals in Frequency Modulated Transmissions
37940G	5917175		US	Modular Hand-Held Data Entry System with Voice Interface
INT094-11C	5940509		US	Method and Apparatus for Controlling Country Specific Frequency Allocation
37834XXBX	5940771		US	Network Supporting Roaming, Sleeping Terminals
37834XXBY		09/318668	US	Network Supporting Roaming, Sleeping Terminals
INT096-30	5946344		.US	Multiple-Rate Direct Sequence Architecture Utilizing a Fixed Chipping Rate and Variable Spreading Code Lengths
INT 096-30JP		10-542772	JP	Multiple-Rate Direct Sequence Architecture Utilizing a Fixed Chipping Ra and Variable Spreading Code Lengths
37998XDA	5949776		US	Hierarchical Communication System using Premises, Peripheral and Vehicular Local Area Networking
38050BAY	5960344		US	Local Area Network Having Multiple Channel Wireless Access
INT096-25	5982812		US	Method and Apparatus for Monitoring Frequency Synthesizer Locking Time
38190R	5990733		US	Delay Line Ramp Demodulator
38000EA	5991864		US	Power Connectors, Antenna Connectors and Telephone Line Connector

DocketNo	Patent No	Senin	Country	
E E E	Tatelita Yo	No		Tille
				for Computer Devices Utilizing Radio and Modern Cards
INT097-06	6005530		US	Switched Gain Antenna for Enhanced System Performance
INT095-35	6005885		US	Methodology for Discontinuous Radio Reception Utilizing Embedded Frame Length Words
36649XZC	6006100		US	Multi-Level, Hierarchical Radio-Frequency Communication System
		96116280.7	EP	, , , , , , , , , , , , , , , , , , , ,
	641541		ΔŪ	Multi-Level, Hierarchical Radio-Frequency Communication System
	494298	•	GB	Multi-Level, Hierarchical Radio-Frequency Communication System
	494298	•	DE	Multi-Level, Hierarchical Radio-Frequency Communication System
	494298		ES	Multi-Level, Hierarchical Radio-Frequency Communication System
	494298		FR	Multi-Level, Hierarchical Radio-Frequency Communication System
	494298		Π	Multi-Level, Hierarchical Radio-Frequency Communication System
	494298	•	NL	Multi-Level, Hierarchical Radio-Frequency Communication System
36649XZD		09/467255	US	Multi-Level, Hierarchical Radio-Frequency Communication System
INT096-29	6009119		US	Adaptive Power Leveling of an RF Transceiver Utilizing Information Stored in Non-Volatile Memory
36767XZAC	6014705		US	Modular Portable Data Processing Terminal Having A Higher Layer and
		• •		Lower Layer Partitioned Communication Protocol Stack for use in a Radio Frequency Communication Network
36767XZAE		09/597917	US	Modular Portable Data Processing Terminal for use in a Radio Frequency Communication Network
38072A	6018555		US	Network Utilizing Modified Preambles that Support Antenna Diversity
36808YXCD	6023147		US	Hand-Held Computerized Data Collection Terminal with Rechargeable Battery Pack Sensor and Battery Power Conservation
37882YAYA	6046992		· US	A Radio Frequency Local Area Network
37882YAYB		09/542424	US	A Radio Frequency Local Area Network
INT096-31	6075807		US	Windowed Digital Matched Filter Circuit for Power Reduction in Battery-Powered CDMA Radios
37882XBA	6084867		US	Apparatus and Method of Routing Data in a Radio Frequency Local Area Network
36837EA	6192400		US .	Multilevel Data Communication System Including Local and Host Systems
36767XYE	6244512		US	Hand-Held Data Capture System with Interchangeable Modules
38234RX	6281850		US	Broadband Multiple Element Antenna System
INT097-02	6320896		US 	RF Receiver Having Frequency-Hopping/Direct-Sequence Spread Spectrum Signal Discrimination
INT097-03	6327312		US	RF Narrowband/Wideband Discriminating System for Spread Spectrum Signal Differentiation
37967CA	6359872		US	Wireless Personal Local Area Network

Docket No	Patent No	Serial Se	Country	Tile
37967CAA		10/101436	US	Wireless Personal Local Area Network
37882YE 37882YEA	6374311	10/123873	US US	Radio Frequency Local Area Network Radio Frequency Local Area Network
37998XGA 37998XGB	6389010	.10/141506	US US	Hierarchical Data Collection Network Supporting Packetized Voice Communications Among Wireless Terminals and Telephones Hierarchical Data Collection Network Supporting Packetized Voice Communications Among Wireless Terminals and Telephones
37882XBB 37882XBC	6400702	10/162229	US US	A Radio Frequency Local Area Network Radio Frequency Local Area Network
38009EBA	6407991		US	Communication Network Providing Wireless and Hard-Wired Dynamic Routing
38009EBB		10/144250	US	Communication Network Providing Wireless and Hard-Wired Dynamic Routing